Page 1 of 7

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,227

DATE: 12/10/2001 TIME: 15:00:38

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12102001\1001227.raw



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              SILOS-SANTIAGO
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C--> 12 <141> CURRENT FILING DATE: 2001-11-30
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     13 <151> PRIOR FILING DATE: 2000-11-30
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RAW SEQUENCE LISTING DATE: 12/10/2001 PATENT APPLICATION: US/10/001,227 TIME: 15:00:38

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12102001\I001227.raw

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DATE: 12/10/2001 PATENT APPLICATION: US/10/001,227 TIME: 15:00:38

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12102001\1001227.raw

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| 135 Arg Thr Leu Leu Asn Ile Thr Lys Glu Gln Val Pro Leu Val Val Glu 136 410 415 | |
| 138 gag tac ctg gac aat gtc aat gag cat gag tag aar aag | |
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| 430 | |
| 142 cgt atg atg gac ata gtt caa gat gog act the state | 450 |
| and the fact Asp ile val Gin Asp Ala Thr Dho Val Trom Ala The | .459 |
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| 140 AFF THE HIS TYP HIS ARG ASP ALA GLY Leu Pro Val Tyr | 307 |
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| 150 gaa ttt gag cac cac gct cgt gga ata atc gtc aaa ccc cgc act gat 151 Glu Phe Glu His Hig Ala Ara Glu Hi | 555 |
| 152 | |
| 4/3 /9/ | |
| 154 ggg gca gac cat ggg gat gag atg tac ttc ctc ttt ggg ggc ccc ttc 16 155 Gly Ala Asp His Gly Asp Glu Met Tyr Phe Leu Phe Gly Gly Pro Phe | 603 |
| | |
| 158 gcc aca ggc ctt tcc atg ggt aag gag ang ang | |
| The dry hed bet met GIV LVS (711) LVS Ala Lou Con Lou Clark | 651 |
| 710 516 | |
| 162 atg aaa tac tgg gcc aac ttt gcc cgg aca gga car | |
| and and the first and Ash Phe Ala Arg Thr Gly Ash Pro Ash Ash Cly | 599 |
| 3/3 520 | |
| 166 aat ctg ccc tgc tgg cca cgc tac aac aag gat gaa aag tac ctg cag 17 | 747 |
| 160 Feb 110 Cys 11p P10 Arg Tyr Asn Lys Asp Glu Lys Tyr Leu Glp | -, |
| 540 | |
| 170 ctg gat ttt acc aca aga gtg ggc atg aag ctc aag gag aag aag atg 17 | 95 |
| 171 Leu Asp Phe Thr Thr Arg Val Gly Met Lys Leu Lys Glu Lys Lys Met 172 555 | |
| 174 gct ttt tgg atg agt ctg tac cag tgt gap age and | |
| 175 Ala Phe Trp Met Ser Leu Tyr Gln Ser Gln Arg Pro Glu Lys Gln Arg | 43 |
| 3/5 | |
| 178 caa ttc taagggtggc tatgcaggaa ggagccaaag aggggttta | 0.0 |
| The same time | |
| 182 caggecetgg ggagactage catggacata cetggggaca agagttetae ecaagggega 195 | 50 |
| | |
| TO THE TO NO. 2 | 33 |
| 186 <211> LENGTH: 584 187 <212> TYPE: PRT | |
| 188 <213> OPCANTON, Home | |
| 188 <213> ORGANISM: Homo sapiens 190 <400> SEQUENCE: 2 | |
| 191 Met Pro Ser Thr Val Leu Pro Sor The Val T | |
| 191 Met Pro Ser Thr Val Leu Pro Ser Thr Val Leu Pro Ser Leu Leu Pro 192 1 5 10 15 | |
| 193 Thr Ala Gly Ala Gly Trp Ser Met Arg Trp Ile Leu Cys Trp Ser Leu | |
| | |
| 195 Thr Leu Cys Leu Met Ala Gln Thr Ala Leu Gly Ala Leu His Thr Lys | |
| and dea ory Ara Lea Hrs Thr Lys | |

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/001,227

DATE: 12/10/2001 TIME: 15:00:38

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12102001\1001227.raw

| 1: | 96 | | | 35 | | | | | 40 | | | | | | | | | | |
|-----|-------------|------|----------------|------|------------|---------|--------------|------------|----------|------------|------------|-------|-------|----------|----------|--------------|------|--------------|--|
| 19 | 97 A: | ra | Pro | | | 1 Va | 1 Th | r Lv | 4.0 | ~ ~ ~ 1 | 1 | m l | | 1 | 4.5 |) | | | |
| 19 | 98 | , | 50 | | , | _ , , , | T 111 | т Бу 55 | ь ту | 1 6. | гу | Tui | : Lei | | | .у Lу | s G | ln Met | |
| 19 | 99 н | | | GI | v T.v | e Th | r Dr | , T1 | ^ C1 | 77- | . 1 | -1 | _ | 60 | | | | | |
| 20 | 00 65 | 5 | , u i | 01. | у цу | S 111 | 7 P.L | 0 11 | e GI | n va | 1 L | Phe | Lei | ı Gl | y Va | ıl Pr | o Pł | ne Ser | |
| - ' | | • | | | | | 70 | | | | | | 75 | | | | | ~ ~ | |
| 20 |)2 | . 9 | PIO | PIC | э ге | u GI | А ТТ | e Le | u Ar | g Ph | ıe | Ala | Pro | o Pr | o Gl | u Pr | o Pr | o Glu | |
| | , 2 | | | | | 0.0 | | | | | | an | | | | | ^ - | | |
| 20 |)3 PI | O . | rrp | ГĀЗ | S GI | y Il | e Ar | g As | p Al | a Th | ır | Thr | Туз | r Pr | o Pr | o Gl | y Cy | s Leu | |
| ~ ` | • | | | | T () | U | | | | 1 (| רו | | | | | 11 | Λ | | |
| 20 | 15 G1 | n (| 31u | Sei | rTr | p Gl | y Gl | n Le | u Al | a Se | r | Met | Tyr | · Va | l Se | r Th | r Ar | g Glu | |
| | | | | 44. | , | | | | 12 | () | | | | | ່ 1 າ | _ | | | |
| 20 | 7 Ar | .g] | 'yr | Lys | Tr | e Lei | ı Ar | g Ph | e Se | r Gl | u | Asp | Cvs | Le | ı Tv | r T.e | n Ae | n Val | |
| | • | _ | | | | | | 1.5 | ገ | | | | | 1/ | ^ | | | | |
| 20 | 9 Ty | rA | lla | Pro |) Ala | a Ar | g Ala | a Pro | o Gl | v As | a | Pro | Gln | ים. ד | ı Dr | 0 V2 | l Mo | t Val | |
| ~- | | _ | | | | | 10 | , | | | | | 155 | | | | | 1.00 | |
| 21 | 1 Tr | рF | he | Pro | Gly | Gly | / Ala | Phe | e T16 | - Va | 7 | Glv | Δla | , אוג | | ~ C~. | · m | 160 r Glu | |
| 21 | 2 | | | | _ | 165 | 5 | | | - vu | _ | 170 | Ата | . A10 | 1 Se | r se | | | |
| 21 | 3 G1 | y S | er | Asp | Leu | 1 Ala | Ala | Δro | r G1. | 1 T 17 | ς. | 1/0 | 17n 1 | . | | | 17 | u Gln | |
| 21 | 4 | - | | - 4 | 180 |) | | |) GI | 18 | 5 | Val | vaı | ье | ı va | | | u Gln | |
| 21 | 5 Hi | s A | ra | Leu | | | Dhe | . G1. | , Dh | TO. | | O | m1. | _ | _ | 190 |) | | |
| 21 | 6 | | _ 5 | 195 | | 110 | . 1116 | . GI | 200 | . те | u | ser | Thr | ASE | As | Sei | : Hi | s Ala | |
| | | a G | 1 v | | | C15 | . T.O. | τ | 200 | | | | | | 20 | 5 | | | |
| 21 | 8 | ່ວ | 10 | Mon | 115 | , сту | теп | ьес | . ASP |) GI | n j | Met | Ala | Ala | Le | ı Arç | Tr | o Val | |
| | | | | λan | т1. | | 21- | 215 |) ~-7 | | | | | 220 |) | | | | |
| 22 | 0 22 | 5 | ıц | ASII | тте | Ald | Ala | Pne | GLy | Gl: | У | Asp | Pro | Gly | ' Ası | ı Val | Th | r Leu | |
| | · 22. | _ | | | | | 230 | | | | | | 225 | | | | | 0.40 | |
| 22 |) T E110 | = G | тУ | GTII | ser | ATa | GLY | Ala | Met | Sea | r I | Ile | Ser | Gly | Let | ı Met | Met | Ser | |
| 22. | _ | | | | | 243 | | | | | - 1 | 250 | | | | | 250 | • | |
| 22. |) PIC |) Г | eu | А1а | Ser | GLy | Leu | Phe | His | Arg | j 2 | Ala | Ile | Ser | Glr | Ser | Gly | 7 Thr | |
| 22 | I | | | | ∠o∪ | | | | | 265 | 5 | | | | | 070 | | | |
| 223 | ATS | 1 Ге | eu | Phe | Arg | Leu | Phe | Ile | Thr | Ser | ? <i>P</i> | Asn | Pro | Leu | Lys | Val | Ala | Lys | |
| • | • | | | 213 | | | | | 280 | | | | | | 205 | | | | |
| 227 | Lys | Va | al A | Ala | His | Leu | Ala | Gly | Cys | Asn | ı E | lis | Asn | Ser | Thr | Gln | Tle | Leu | |
| | • | ۷. | , 0 | | | | | 295 | | | | | | 300 | | | | | |
| 229 | Val | . As | sn (| Cys | Leu | Arg | Ala | Leu | Ser | Gly | 'nТ | hr | Lvs | Va1 | Met | Ara | Va 1 | Ser | |
| | 303 | | | | | | 210 | | | | | | 215 | | | | | | |
| 231 | Asn | LΣ | s 1 | Met | Arg | Phe | Leu | Gln | Leu | Asn | P | he | G1n | Ara | Δen | Dro | C1., | 320 Glu | |
| 202 | | | | | | 323 | | | | | - 3 | เรก | | | | | 225 | | |
| 233 | Ile | 11 | .e : | rp | Ser | Met | Ser | Pro | Va 1 | Val | Α | sn | Gl v | V = 1 | 17 - 1 | Tlo | 335 | Asp | |
| | | | | | J40 | | | | | 4/15 | | | | | | 2 - 2 | | | |
| 235 | Asp | Pr | o I | Leu | Val | Leu | Leu | Thr | Gln | G1v | т. | we. | Wa 1 | Com | a | 350 | _ | _ | |
| 236 | | | 3 | 355 | | | | | 360 | OLY | | ıy 3 | Val | ser | | vaı | Pro | Tyr | |
| 237 | Leu | Le | u G | lv | Va 1 | Asn | Agn | T.011 | Glu | Dho | 71 | an 1 | · | T | 365 | _ | | | |
| 238 | | 37 | 0 | 1 | | | -1011 | 375 | JIU | - 11G | A | 911 : | ттр | neu | ьeu | Pro | Tyr | Ile | |
| 239 | Met | | | he | Pro | T.011 | λen | 7.5 | C1 - | n 1 = | | | _ | 380 | | | | | |
| 240 | 385 | -1 | | | - 20 | _cu | 390 | лту | Gln | AIG | M | er A | Arg | гàг | GLu | Thr | Ile | Thr | |
| | | MΩ | + т | יום. | Trn | 802 | J∄U TID ~ | 7 | m 1 | . . | _ | | 395 | | | | | 400 | |
| 242 | -15 | | - 1 | ·cu | * + P | 405 | TIIT | ar.a | Thr | டeu | L. | eu A | Asn | Ile | Thr | Lys | Glu | Gln | |
| | | | | | | 400 | | | | | 4 | 10 | | | | | 416 | | |
| 244 | , | т т. | О П | cu | vai 420 | val | GIU | GIU | Tyr | Leu | As | sp 2 | Asn ' | Val | Asn | Glu | His | Asp | |
| | | | | • | 72U | | | | | 425 | | | | | | 430 | | | |
| | | | | | | | | | | | | | | | | | | | |

RAW SEQUENCE LISTING

DATE: 12/10/2001

PATENT APPLICATION: US/10/001,227

TIME: 15:00:38

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12102001\1001227.raw

| 246 | |
|--|----|
| 249 Leu Pro Val Tyr Leu Tyr Glu Phe Glu His His Ala Arg Gly Ile Ile 250 465 470 475 | |
| 47:3 | |
| 251 Val Lys Pro Arg Thr Asp Gly Ala Asp His Gly Asp Glu Met Tyr Phe | |
| 253 Leu Phe Gly Gly Pro Phe Ala Thr Gly Leu Ser Met Gly Lys Glu Lys | |
| 255 Ala Leu Ser Leu Gln Met Met Lys Tyr Trp Ala Asn Phe Ala Arg Thr | |
| 257 Gly Asn Pro Asn Asp Gly Asn Leu Pro Cys Trp Pro Arg Tyr Asn Lys | |
| 259 Asp Glu Lys Tyr Leu Gln Leu Asp Phe Thr Thr Arg Val Gly Met Lys | |
| 261 Leu Lys Glu Lys Lys Met Ala Phe Trp Met Ser Leu Tyr Gln Ser Gln | |
| 262 565 570 575 263 Arg Pro Glu Lys Gln Arg Gln Phe 264 580 | |
| 267 <210> SEQ ID NO: 3 268 <211> LENGTH: 1752 | |
| 269 <212> TYPE: DNA | |
| 270 <213> ORGANISM: Homo sapiens 272 <220> FEATURE: | |
| 273 <221> NAME/KEY: CDS 274 <222> LOCATION: (1)(1752) | |
| 276 <400> SEQUENCE: 3 277 atg cca tcc aca gtg ttg cca tcc aca gtg ttg cca tca ctc ctg ccc 4 | |
| 279 1 Ser Thr Val Leu Pro Ser Thr Val Leu Pro Ser Leu Leu Pro | 8 |
| 281 aca gca gga gct ggc tgg agc atg agg tgg att otg tgg tgg atg | 6 |
| 282 Thr Ala Gly Ala Gly Trp Ser Met Arg Trp Ile Leu Cys Trp Ser Leu 283 20 25 30 | |
| 200 Inf Leu Cys Leu Met Ala Gln Thr Ala Leu Gly Ala Leu His Thr Lys | 44 |
| 289 agg cot caa gtg gtc acc ass tat ggs agg stg acc acc | |
| 290 Arg Pro Gln Val Val Thr Lys Tyr Gly Thr Leu Gln Gly Lys Gln Met 291 50 55 60 | 92 |
| 293 cat gtg ggg aag aca ccc atc caa gtc ttt tta gga gtc ccc ttc tcc 24 294 His Val Gly Lys Thr Pro Ile Gln Val Phe Leu Gly Val Pro Phe Ser | 10 |
| 75 70 | |
| 297 aga cct cct cta ggt atc ctc agg ttt gca cct cca gaa ccc ccg gag 28 298 Arg Pro Pro Leu Gly Ile Leu Arg Phe Ala Pro Pro Glu Pro Pro Glu 299 | 8 |
| 301 ccc tgg aaa gga atc aga gat gct acc acc tac ccg cct ggg tgg ctr. | 16 |
| 302 Pro Trp Lys Gly Ile Arg Asp Ala Thr Thr Tyr Pro Pro Gly Cys Leu 303 100 105 110 | v |



Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/001,227

DATE: 12/10/2001

TIME: 15:00:39

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\12102001\I001227.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 L:494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5